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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,531	04/02/2001	Earl Hennenhoefer	01-40064-US	9420

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EXAMINER
MA, JOHNNY

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 09/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/824,531	HENNENHOEFER ET AL.	
	Examiner	Art Unit	
	Johnny Ma	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-5 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-5 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. Figures 1 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "20a" (page 17, line 2), "404" (page 19, line11). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because text labels in figures 2, 4, 5, 6, 7, 8, 9, and 10 are not legible. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

1. The disclosure is objected to because of the following informalities: the reference number "238" (page 24, line 10; page 26, line 12; page 27, line 7) should read "38" also the reference number "240" (page 29, line 10) should read "420" furthermore the reference number "210" (page 32, line 2) should read "10". Also the reference number 20, in the specification, has been used to designate both a "display environment" (page 16, line 8) and "outlets" (page 19, line 9).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fuhrmann, U.S. Patent 5,745,837.

Referring to claim 1, Fuhrmann discloses a wideband signal distribution system where a method and apparatus for carrying an ATM communication protocol on a hybrid fiber coax CATV system (Fuhrmann 2:60-61) comprises a superframe structure used by the PHY layer to communicate via SCDMA over the shared HFC or the CATV plant has a data rate of 10 megabits/second (Fuhrmann 42:37-46).

Fuhrmann also discloses at least one intelligent device that distributes single frequency carrier RF signals onto a wide band signal distribution system wherein the single frequency carrier RF signal comprises digital information where a modulator/transmitter converts the digital data in the data stream arriving on bus into amplitude modulations of a carrier signal (Fuhrmann 8:47-50).

Referring to claim 2, Fuhrmann discloses a wideband signal distribution system where a method and apparatus for carrying an ATM communication protocol on a hybrid fiber coax CATV system (Fuhrmann 2:60-61) comprises a superframe structure used by the PHY layer to communicate via SCDMA over the shared HFC or the CATV plant has a data rate of 10 megabits/second (Fuhrmann 42:37-46).

Fuhrmann also discloses a system including 568 standard wiring where a central unit is coupled via a coaxial cable to a plurality of subscribers (Fuhrmann 21:61-64). Note coaxial cable is recognized as a cabling choice in the 568 wiring standard.

Fuhrmann also discloses at least one intelligent device that distributes single frequency carrier RF signals off of a wide band signal distribution system where the function of the receivers is to demodulate the received signals (Fuhrmann 11:1-3).

Fuhrmann also discloses single frequency carrier RF signals that comprise digital information where the modulator/transmitter transmits digital data (Fuhrmann 8:47).

Referring to claim 3, Fuhrmann discloses a wideband signal distribution system where a method and apparatus for carrying an ATM communication protocol on a hybrid fiber coax CATV system (Fuhrmann 2:60-61) comprises a superframe structure used by the PHY layer to communicate via SCDMA over the shared HFC or the CATV plant has a data rate of 10 megabits/second (Fuhrmann 42:37-46).

Fuhrmann also discloses at least one addressable device having at least one input and one output where the remote unit with the identity broadcast by the control unit recognizes its identity in the broadcast message and enters a fine-tuning mode (Fuhrmann 19:7-9) and the remote unit also acts as an interface between the television, computer, telephone and other devices and the transmission media (Fuhrmann 21:66-67, 22:1-2).

Fuhrmann also discloses an intelligent device that communicates with said addressable device where the central unit sends and receives digital information bi-directionally with each subscriber's remote unit (Fuhrmann 21:64-66).

Fuhrmann also discloses single frequency carrier RF signals comprising digital information where a modulator/transmitter converts the digital data in the data stream arriving on bus into amplitude modulations of a carrier signal (Fuhrmann 8:47-50).

Fuhrmann also discloses a class of service identification processor to determine quality of service needed for a digital IP portion of the digital signal portion where ATM Quality of Service guarantees or guaranteed bandwidth availability is implemented by controlling the code space at the media access control layer (Fuhrmann 3:14-16) and each channel which can carry digital data encoding some service such as internet access (Fuhrmann 22:19-21). Fuhrmann does not explicitly mention a Class of Service identification processor but it is nonetheless inherent to the system.

Fuhrmann also discloses the processor selects specific RF carrier based on quality of service needed where Fuhrmann also discloses one type of error recovery that can be used is to send a message in the downstream data telling the CE that has lost synchronization to resynchronize (Fuhrmann 55: 14-17). Where a control sequence controls the frequency of a local beat frequency oscillator for receiver and is synchronized with the code sequence fed to the transmitter for the channel (Fuhrmann 12:29-36).

Referring to claim 4, Fuhrmann discloses a wideband signal distribution system where a method and apparatus for carrying an ATM communication protocol on a hybrid fiber coax CATV system (Fuhrmann 2:60-61) comprises a superframe structure used by the PHY layer to communicate via SCDMA over the shared HFC or the CATV plant has a data rate of 10 megabits/second (Fuhrmann 42:37-46).

Fuhrmann also discloses at least one intelligent device that distributes single frequency

carrier RF signals onto a wide band signal distribution system wherein the single frequency carrier RF signal comprises digital information where a modulator/transmitter converts the digital data in the data stream arriving on bus into amplitude modulations of a carrier signal (Fuhrmann 8:47-50).

Fuhrmann also discloses wherein at least one intelligent device uses existing media control access layer of network in order to control the sharing of media channels among multiple addressable devices in the system where the CPU's perform the media access control algorithm in reading how much data each CPE has sent and received in the last 10 milliseconds, generating and arbitrating access requests, resolving contentions on the access channels, assigning channels etc (Fuhrmann 40:34-38).

Referring to claim 5, Fuhrmann discloses a wideband signal distribution system where a method and apparatus for carrying an ATM communication protocol on a hybrid fiber coax CATV system (Fuhrmann 2:60-61) comprises a superframe structure used by the PHY layer to communicate via SCDMA over the shared HFC or the CATV plant has a data rate of 10 megabits/second (Fuhrmann 42:37-46).

Fuhrmann also discloses at least one intelligent device that distributes single frequency carrier RF signals off of a wide band signal distribution system where the function of the receivers is to demodulate the received signals (Fuhrmann 11:1-3).

Fuhrmann also discloses single frequency carrier RF signals that comprise digital information where the modulator/transmitter transmits digital data (Fuhrmann 8:47).

Fuhrmann also discloses wherein at least one intelligent device uses existing media control access layer of network in order to control the sharing of media channels among multiple

addressable devices in the system where the CPU's perform the media access control algorithm in reading how much data each CPE has sent and received in the last 10 milliseconds, generating and arbitrating access requests, resolving contentions on the access channels, assigning channels etc (Fuhrmann 40:34-38).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (703) 305-8099. The examiner can normally be reached on 8:00 am - 6:00 pm (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703)305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5399 for regular communications and (703) 308-5399 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

jm
September 3, 2002

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600